



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,528	10/24/2001	John S. Petty	4015-1812	2980

24112 7590 01/26/2005

COATS & BENNETT, PLLC  
P O BOX 5  
RALEIGH, NC 27602

EXAMINER
----------

FERGUSON, KEITH

ART UNIT	PAPER NUMBER
----------	--------------

2683

DATE MAILED: 01/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/001,528

Applicant(s)

PETTY, JOHN S.

Examiner

Keith T. Ferguson

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-11, 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-18, 21 and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

Art Unit: 2683

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. Claims 12,13,21 and 22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
2. Claim 21 recites the limitation "the positive voltage level" in line 9. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hollenbach et al. in view of Lindell et al., newly recited reference.

Regarding claim 14, Hollenbach et al. discloses a radiotelephone (cellular telephone) (col. 5 lines 40-42) comprising: radio circuitry for radio frequency communication with a remote radio device (modem) (col. 5 lines 40-57); a

Art Unit: 2683

controller coupled to the radio circuitry for controlling operation of the radiotelephone (inherent, since the cellular phone is connected to the modem during a cellular telephone call, as taught in col. 6 lines 14-18); a data circuit for communicating digital data with a detachable modem circuit (col. 5 lines 43-48 and col. 6 lines 10-18), the data circuit being responsive to a supply voltage on an interface node (fig. 3 number 100) for providing output digital signals to the modem circuit and receiving input digital signals from the modem circuit (col. 5 line 42 through col. 6 line 31), the input digital signals and the output digital signals at voltage levels suitable for communication with the modem circuit (col. 5 line 66 through col. 6 line 31); and an interface circuit (fig. 3 number 108) coupled to the interface node (fig. 3 number 100), the interface circuit configured to provide the supply voltage to match the output digital signals to logic voltages used by logic circuits of the modem circuit (col. 6 lines 15-31). Hollenbach et al. differs from claim 14 of the present invention in that it does not disclose an interface node for electrically connecting said radiotelephone to the supply voltage of a detachable modem circuit. Lindell et al. teaches a plug in module (200) that can be used in a cellular telephone (104) or laptop computer (102) (col. 5 lines 39-67) wherein a module connector (col. 7 lines 40-62) for electrically the supply voltage of a detachable modem circuit (col. 8 lines 1-17 and col. 8 lines 36-62). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hollenbach et al. cellular telephone with an interface node for electrically connecting said radiotelephone to the supply voltage of a detachable modem circuit in order for the cellular telephone to save power by not having to supply power to the modem circuit, as taught by Lindell et al..

6. Claim 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollenbach et al. in view of Lindell et al. as applied to claim 14 above and in further view of Rauhala et al., newly recited reference.

Regarding claims 15-18, the combination of Hollenbach et al. and Lindell et al. differs from claims 15-18 of the present invention in that they do not disclose the interface circuit is configured to provide the regulated supply voltage to the interface node unless the modem circuit supplies a larger voltage to the interface node. Rauhala et al. teaches an portable data processor (electronic device) with telephone capabilities (col.

Art Unit: 2683

3 lines 1-30 and col. 5 lines 24-67) attachable to a transceiver expansion card (col. 3 lines 1-67, col. 4 lines 44-54 and col. 5 lines 24-67) wherein an interface circuit is configured to provide the regulated supply voltage to the interface node (col. 5 lines 24-67, col. 7 lines 14-67 and col. 8 lines 14-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Hollenbach et al. and Lindell et al. with the interface circuit is configured to provide the regulated supply voltage to the interface node unless the modem circuit supplies a larger voltage to the interface node in order for the cellular telephone to provide the amount of voltage needed to operate the modem circuit when the modem circuit battery runs low, as taught by Rauhala et al..

***Allowable Subject Matter***

3. Claims 12,13,21,22 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson  
Art Unit 2683  
January 21, 2005

